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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

**Katsumi MIYATA et al.**

Serial Number: **09/478,508**

Group Art Unit: **2814**

Filed: **January 6, 2000**

Examiner: **GRAYBILL, D.**

For: **SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME**

**REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION**

**BOX AF**

Commissioner for Patents  
Washington, D.C. 20231

Date: February 26, 2002

Sir:

In response to the Office Action dated December 20, 2001, reconsideration of the rejection  
is respectfully requested.

**REMARKS**

Claims 16 and 17 are pending in this application. Reconsideration of the rejections in view of the following remarks is respectfully requested.

**Rejection under 35 USC §102(b)**

Claim 16 was rejected under 35 USC §102(b) as being anticipated by Cook (U.S. Patent No. 5,719,070).

The Examiner appears to allege that the uppermost layer of the present invention is equivalent to the gold (Au) layer of Cook. The invention disclosed in Cook, however, is a metallization composite (26) of Ti/Ni/Cu. Therefore, an uppermost gold layer in Cook overlays on the Cu layer as shown in Fig. 2.

On the other hand, in the present invention, as described in claim 16, the uppermost layer is made of a material which easily alloys with the material of the intermediate conductive metal layer and has resistance to oxidation. Therefore, when gold is selected as the uppermost layer, copper will not be selected as a material of the intermediate layer since it does not “easily alloy” with gold. According to the present invention, when the uppermost layer is made of gold, nickel is to be selected as the intermediate layer.

Therefore, since Cook’s gold layer cannot be regarded as the uppermost layer of the present invention that “easily alloys” with the metal of the intermediate conductive metal layer and has

resistance to oxidation, Cook does not teach or suggest the semiconductor device of the present invention.

For at least these reasons, claim 16 patentably distinguishes over the cited reference.

#### **Rejection under 35 USC §103(a)**

Claim 17 was rejected under 35 USC §103(a) as being obvious over Cook (U.S. Patent No. 5,719,070).

As discussed above, claim 16 patentably distinguishes over Cook. Claim 17, depending from claim 16, also patentably distinguishes over the cited reference for at least the same reasons.

#### **Conclusion**

It is submitted that nothing in the cited reference, teaches or suggests all the features recited in each claim of the present invention. Thus all pending claims are in condition for allowance. Reconsideration of the rejections, withdrawal of the rejections and an early issue of a Notice of Allowance are earnestly solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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